

Date: Friday, 11/18/2005 5:31:36 PM  
 User: Linda Lacelle

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: WEARPLATE
Job Number	: 24878		
Estimate Number	: 10299		
P.O. Number	: N/A	Part Number	: D25775
This Issue	: 11/18/2005 S.O. No. : N/A	Drawing Number	: D2577 REV E
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : PURCHASED PARTS	Drawing Revision	: E
Previous Run	: N/A	Material	: N/A
Written By	: SEE COMMENT BELOW	Due Date	: 12/15/2005
Checked & Approved By	: SEE ABOVE USER & DATE	Qty:	50 Um: Each
Comment	: Est: F 02.09.24 Re-format KJ/RF		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: 146

Email or Ship DXF file to vendor

Laser Cut per Dwg D2577 flat pattern D2577-5

Material release note required

L 05/11/22

(50)

2.0	D25775F	Wearplate, Centre
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Comment: Qty: 1.0000 U(s) Unit Total: 50.0000 U(s)

WEAR PLATE FWD

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Receive &amp; Inspect For Transit Damage

Ensure material release note is attached

DL 05/12/30 50

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

Inspect dimensions per template D2577-5T1

J 06/01/11 50

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL &amp; MEDIUM FAB RESOURCE 1

Deburr

N/A

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: DD Date: 06/03/22  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 11/18/2005 5:31:36 PM  
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 24878

Part Number: D25775

Job Number:



Seq. #: Machine Or Operation: Description:

6.0 BRAKE NC NC BRAKE



Comment: NC BRAKE

1-Form on brake using DT8155 and DT8179 as per Dwg D2577

2-Form joggle using DT8157 as per Dwg D2577

3-Identify as D2577-5

(50)

SB 06/01/19

7.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Jan-20

8.0 POWDER COATING POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

DL 06/03/21

(50)

9.0 QC3 INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

ml 06 03 22

(50)

10.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: f.p

ml 06 03 22 (50)

11.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

(50) 06/03/22

Job Completion



W 06.03.22

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Nov 18, 2005  
09:21 am

Work Order No : 0024878  
Project Name : D2577-5  
Project For : WK550  
Work Order Type : Main  
Main WO Number :  
House Part Number : D2577-5  
Description : Wearplate, Centre  
Manufactured : Yes  
Amount Req'd : 50  
Amount Done : 0  
Start Date : 11-18-05  
Est Finish Date : 12-15-05  
Act Finish Date :  
Drawings Req'd : No  
Ok for Approval :  
Approval Rec'd :

Department Code:  
Burden Flags : NNNNNNN  
WO Status : Open  
Invoice State : Not Invoiced  
Invoice Date :  
Invoice Number :  
Invoice Amount : 0.00  
Order Entry No :  
OE Value : 0.00  
Est Margin : 0.000%  
Actual Margin : 0.000%  
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Margin :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00



New Zealand Steel Limited  
Glenbrook, South Auckland  
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(09) 235 8089 / 235 3535 Wairuku  
Fax: (09) 375 8850

# TEST CERTIFICATE

Ref: S210/22493

CUSTOMER	Wilkinson	P50323 DI001	SPECIFICATION	ASTMA1808 CS Type A	CERTIFICATE No	TC112397
CUSTOMER O/N	90-21N-686		PRODUCT	CRA WIDE COIL	PAGE	1 of 1
MILL O/N	480737		DIMENSIONS	0.055" x 48" x Coil	DATE	09 June 2005

PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT																MECHANICAL TESTS (TEST SPECIFICATION - ASTM A370)							DATE	09 June 2005
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE ( )	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH		
		x100			x1000										x10000		x100	180°				G.L. =	HRB	( )	(feet)	
R9-459713-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				54		1585		
R9-459714-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				54		1457		
R9-459715-00	641513	5	TR	18	9	18	12	17	15	1	6	1	1					Good				48		1375		
R9-459716-00	641513	5	TR	18	9	18	12	17	15	1	6	1	1					Good				48		1473		
R9-459717-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				48		1631		
R9-459718-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				48		1093		
R9-459719-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				50		1562		
R9-459720-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				50		1535		
R9-460380-00	641761	4	TR	20	13	17	12	18	25	5	8	1	1					Good				50		1581		
R9-460381-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				49		1562		
R9-460382-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				49		1503		
R9-461458-00	642309	2	TR	18	10	20	11	17	19	1	6	1	1					Good				48		1785		

YIELD	GAUGE LENGTH (G.L.)	PLASTIC STRAIN RATIO (r)	IMPACT TEST	CARBON EQUIVALENT VALUE (CE)
(A)=0.2% PROOF STRESS	(A)=200mm (C)=80mm (E)=2"	(A)=0 (C)=r45	(A)=5mm x 5mm	(A)=C+Mn/6
(B)=LOWER YIELD STRESS	(B)=50mm (D)=5.65? So (F)=8"	(B)=90 (D)=(r0+r90+2r45)/4	(B)=10mm x 10mm	(B)=C+Mn/6+(Cr+V+Mo)/5+(Cu+Ni)/15
			(B)=7.5mm x 10mm	(C)=C+Mn/6+Si/24
				(D)=

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED  
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED *Satish Misra*  
QC METALLURGIST

16 ga 25 065 146, 267, 245





New Zealand Steel Limited  
Glenbrook, South Auckland  
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(09) 235 8080 / 235 3535 Waiuku  
Fax: (09) 375 8950

# TEST CERTIFICATE

Ref: 5379/23850

Reissued 22/8/2005

CUSTOMER	Wilkinson	P50505-01002	SPECIFICATION	ASTMA1008 CS Type A	CERTIFICATE No	TC116858																			
CUSTOMER ON	98-21N-742		PRODUCT	CRA WIDE COIL	PAGE	1 of 1																			
MILL ON	486968		DIMENSIONS	0.033" x 48" x Coil	DATE	19 August 2005																			
PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT														MECHANICAL TESTS (TEST SPECIFICATION - ASTMA370)									
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE ( )	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH	
		x100				x1000								x10000		x100		180°				G.L.=	HRB	( )	(feet)
R9-466089-00	845423	6	TR	21	11	16	17	20	16	2	3	1	3					Good				58		2700	
R9-466081-00	845423	6	TR	21	11	16	17	20	16	2	3	1	3					Good				58		2700	
R9-466082-00	845253	6	1	21	10	12	28	30	15	2	3	1	3					Good				47		2651	
R9-466083-00	845253	6	1	21	10	12	28	30	15	2	3	1	3					Good				47		2651	

YIELD	GAUGE LENGTH (G.L.)				PLASTIC STRAIN RATIO (r)				IMPACT TEST				CARBON EQUIVALENT VALUE (CE)			
(A)=0.2% PROOF STRESS	(A)=200mm	(C)=80mm	(E)=2"		(A)=0	(C)=r45			(A)=10mm x 10mm	(C)=5mm x 6mm			(A)=C+Mn/6			(C)=C+MnV5+Si/24
(B)=LOWER YIELD STRESS	(B)=50mm	(D)=5.65 x So	(F)=8"		(B)=90	(D)=(r0+r90+2r45) / 4			(B)=7.5mm x 10mm	(E)=5mm x 10mm			(B)=C+Mn/6+(Cr+V+Mo)/5+(Cu+Ni)/15			(D)=

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED  
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED *Satish Misra*  
QC METALLURGIST

20 gms

PO# 267, 146,



